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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,626	03/15/2002	Pauli Seppinen	874.0107.U1(US)	2282

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HARRINGTON & SMITH, LLP
4 RESEARCH DRIVE
SHELTON, CT 06484-6212

EXAMINER	
TRAN, PABLO N	

ART UNIT	PAPER NUMBER
2618	

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/099,626	SEPPINEN ET AL.	
	Examiner	Art Unit	
	Pablo N. Tran	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) *31,32 and 38* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-18,20-30,33-35,37 and 39-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/09/02, 07/15/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-3, 5-10, 15-18, 20-25, 30, 33-35, 37, and 39-45 are rejected under 35 U.S.C. 102(e) as being anticipated by Kivekas et al. (US20040137870A1).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As per claims 1, 16, 33, 39, and 42-43, and 45, Kivekas et al. disclose a RF apparatus comprising calibration means that operates under control of a data processor for calibrating RF circuitry, wherein having means for sourcing a RF calibration signal, means for injecting the calibration signal into an amplifier, means for measuring a downconvert response of said RF apparatus at a plurality of different internal states of said RF apparatus using at least one frequency of the RF calibration signal, and means for performing al least one of tuning a resonance frequency of al least one resonator based on the measured downconverted response so as to compensate at least for variations in component values that comprise said at least one resonator or adjusting linearity of said RF apparatus (abstract, 0046-0049).

As per claims 2, 17, and 34, Kivekas et al. disclose the calibration signal is generated using a frequency synthesizer (fig. 3).

As per claims 3, 18, and 35, Kivekas et al. disclose the calibration signal is generated using an oscillator (fig. 3).

As per claims 5 and 20, Kivekas et al. disclose step of compensation for variations in power supply current using one of predetermined information or executing the calibration procedure at different power supply current levels (0049-0053).

As per claims 6 and 21, Kivekas et al. disclose a modulated calibration signal, and where adjusting the linearity of RF apparatus comprises making an adjustment for

either the second order input intercept point IIP2 or the third order input intercept point IIP3 (0024-0025).

As per claims 7 and 22, Kivekas et al. disclose an output of the amplifier is coupled to an input of a downconversion mixer, and where the step of measuring observes an output of a received signal strength is located downstream from the downconversion mixer (fig. 3, 0045).

As per claims 8 and 23, Kivekas et al. disclose a direct conversion receiver, where an output of the amplifier is coupled to an input of a downconversion mixer, and where the calibration signal is modulated so as to avoid the generation of a DC or a passband signal at the output of the downconversion mixer during normal downconversion operation (0045-0049).

As per claims 9 and 24, Kivekas et al. disclose attenuating the calibration signal (fig. 3, 0045).

As per claims 10 and 25, Kivekas et al. disclose injecting the calibration signal includes disabling a normal received signal input to the amplifier (0045-0049).

As per claims 15, 30, and 37, Kivekas et al. disclose changing the resonance frequency after calibrating, during normal operation, or based on a current local oscillator frequency (0051-0051, 0056-0059).

As per claim 40, Kivekas et al. disclose the calibration signal is located outside of a receiver passband transfer function so that the calibration signal is not totally rejected (fig. 3, 0045-0048).

As per claim 41, Kivekas et al. disclose the calibration signal is separated from the received signal spectrum by bandpass filtering in the digital domain (fig. 3, 0045-0048).

As per claim 44, as stated above in claim 1, Kivekas et al. disclose a memory (where it is clear that such RF device, fig. 3, would comprise a memory to store communication instruction in order to facilitate communications).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 11-14 and 26-29 are rejected under 35 U.S.C. 103(a) as being obvious over Kivekas et al. (US20040137870A1).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed

in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

As per claims 11-14 and 26-29, Kivekas et al. do not disclose such communication method is operate in accordance with TDMA or CDMA protocol. However, such is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art to utilized such communication method in order to effectively facilitate communication.

Allowable Subject Matter

5. Claims 4, 19, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (571)272-7898. The examiner normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the

examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) System. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see httpr//pair-directauspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PABLO N. TRAN
PRIMARY EXAMINER

April 16, 2006